

ABSTRACT

A stainless steel tube for a automobile structure member having excellent formability for secondary operation comprises: a chemical composition including not more than 0.20 mass % of C; not more than 1.5 mass % of Si; not more than 2.0 mass % of Mn; 10-18 mass % of Cr; not more than 0.03 mass % of N; or further at least one type of element selected from the group of : not more than 0.6 mass % of Cu; not more than 0.6 mass % of Ni; not more than 2.5 mass % of Mo; not more than 1.0 mass % of Nb; not more than 1.0 mass % of Ti; and not more than 1.0 mass % of V; Fe as the remainder and the inevitable impurities; and a structure which is constituted of ferrite or ferrite and martensite, wherein the TE value defined by the following formula (1) exceeds 25,000 MPa · %.

$$\text{TE value} = \text{TS} \times (\text{El} + 21.9)$$

In the aforementioned formula, TS represents the tensile strength in the tube axial direction (MPa), and El represents the elongation in the tube axial direction (%).